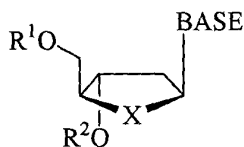


We Claim:

1. A method for the treatment of a host infected with a drug-resistant form of HBV, comprising administering an effective amount of a β -L-2'-deoxynucleoside, or a pharmaceutically acceptable salt, ester or prodrug thereof.
2. A method for the treatment of a host infected with a drug-resistant form of HBV, comprising administering an effective amount of a β -L-2'-deoxythymidine, or a pharmaceutically acceptable salt, ester or prodrug thereof.
3. A method for the treatment of a host infected with a drug-resistant form of HBV, comprising administering an effective amount of a β -L-2'-deoxycytidine, or a pharmaceutically acceptable salt, ester or prodrug thereof.
4. A method for the treatment of a host infected with a drug-resistant form of HBV that exhibits a mutation at the 552 codon from methionine to valine in the DNA polymerase region, comprising administering an effective amount of a β -L-2'-deoxynucleoside, or a pharmaceutically acceptable salt, ester or prodrug.
5. A method for the treatment of a host infected with a drug-resistant form of HBV that exhibits a mutation at the 552 codon from methionine to valine in the DNA polymerase region, comprising administering an effective amount of a compound of the formula (I):



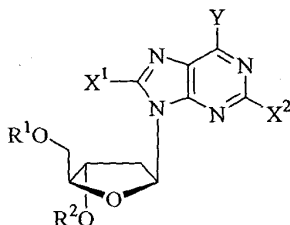
or a pharmaceutically acceptable salt, ester or prodrug thereof, wherein:

R^1 and R^2 are independently hydrogen, straight chained, branched or cyclic alkyl, acyl, acetyl, butyryl, CO-alkyl, CO-aryl, CO-alkoxyalkyl, CO-aryloxyalkyl, CO-substituted aryl, alkylsulfonyl, arylsulfonyl, aralkylsulfonyl, amino acid residue, mono, di, or triphosphate, or a phosphate derivative;

X is O, S, SO_2 or CH_2 ; and

BASE is a purine or pyrimidine base that may optionally be substituted.

6. A method for the treatment of a host infected with a drug-resistant form of HBV that exhibits a mutation at the 552 codon from methionine to valine in the DNA polymerase region, comprising administering an effective amount of a compound of the formula:



or a pharmaceutically acceptable salt, ester or prodrug thereof, wherein:

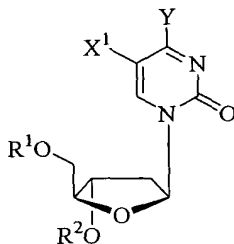
R^1 and R^2 are independently hydrogen, straight chained, branched or cyclic alkyl, acyl, acetyl, butyryl, CO-alkyl, CO-aryl, CO-alkoxyalkyl, CO-aryloxyalkyl, CO-substituted aryl, alkylsulfonyl, arylsulfonyl, aralkylsulfonyl, amino acid residue, mono, di, or triphosphate, or a phosphate derivative;

Y is OR^3 , NR^3R^4 or SR^3 ;

X^1 and X^2 are independently selected from the group consisting of H, straight chained, branched or cyclic alkyl, acyl, acetyl, butyryl, CO-alkyl, CO-aryl, CO-alkoxyalkyl, halogen, OR^5 , NR^5R^6 or SR^5 ; and

R^3 , R^4 , R^5 and R^6 are independently H, straight chained, branched or cyclic alkyl, dialkylaminoalkylene, acyl, acetyl, butyryl, CO-alkyl, CO-aryl, CO-alkoxyalkyl, CO-aryloxyalkyl, CO-substituted aryl, alkylsulfonyl, arylsulfonyl, aralkylsulfonyl, amino acid residue, mono, di, or triphosphate, or a phosphate derivative.

7. A method for the treatment of a host infected with a drug-resistant form of HBV that exhibits a mutation at the 552 codon from methionine to valine in the DNA polymerase region, comprising administering an effective amount of a compound of the formula:



or a pharmaceutically acceptable salt, ester or prodrug thereof, wherein:

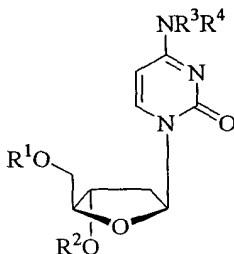
R^1 and R^2 are independently hydrogen, straight chained, branched or cyclic alkyl, acyl, acetyl, butyryl, CO-alkyl, CO-aryl, CO-alkoxyalkyl, CO-aryloxyalkyl, CO-substituted aryl, alkylsulfonyl, arylsulfonyl, aralkylsulfonyl, amino acid residue, mono, di, or triphosphate, or a phosphate derivative;

Y is OR^3 , NR^3R^4 or SR^3 ;

X^1 is selected from the group consisting of H, straight chained, branched or cyclic alkyl, acyl, acetyl, butyryl, CO-alkyl, CO-aryl, CO-alkoxyalkyl, halogen, OR^5 , NR^5R^6 or SR^5 ; and

R^3 , R^4 , R^5 and R^6 are independently H, straight chained, branched or cyclic alkyl, dialkylaminoalkylene, acyl, acetyl, butyryl, CO-alkyl, CO-aryl, CO-alkoxyalkyl, CO-aryloxyalkyl, CO-substituted aryl, alkylsulfonyl, arylsulfonyl, aralkylsulfonyl, amino acid residue, mono, di, or triphosphate, or a phosphate derivative.

8. A method for the treatment of a host infected with a drug-resistant form of HBV that exhibits a mutation at the 552 codon from methionine to valine in the DNA polymerase region, comprising administering an effective amount of a compound of the formula:

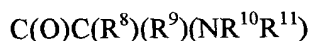


or a pharmaceutically acceptable salt, ester or prodrug thereof, wherein:

R¹ and R² are independently hydrogen, straight chained, branched or cyclic alkyl, acyl, acetyl, butyryl, CO-alkyl, CO-aryl, CO-alkoxyalkyl, CO-aryloxyalkyl, CO-substituted aryl, alkylsulfonyl, arylsulfonyl, aralkylsulfonyl, amino acid residue, mono, di, or triphosphate, or a phosphate derivative; and

R³ and R⁴ are independently H, straight chained, branched or cyclic alkyl, dialkylaminoalkylene, acyl, acetyl, butyryl, CO-alkyl, CO-aryl, CO-alkoxyalkyl, CO-aryloxyalkyl, CO-substituted aryl, alkylsulfonyl, arylsulfonyl, aralkylsulfonyl, amino acid residue, mono, di, or triphosphate, or a phosphate derivative.

9. The method of claims 8, wherein R³ and/or R⁴ is H.
10. The method of claim 8, wherein R¹ and/or R² is H.
11. The method of claim 8, wherein at least one of R¹, R² or R⁴ is an amino acid residue of the formula:



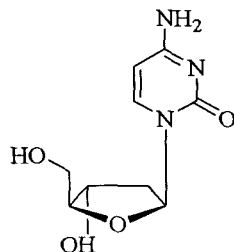
wherein:

R⁸ is the side chain of an amino acid, alkyl, aryl, heteroaryl, heterocyclic, or can optionally attach to R¹⁰ to form a ring structure;

R^9 is hydrogen, alkyl, or aryl; and

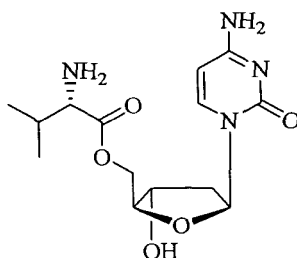
R^{10} and R^{11} are independently hydrogen, acyl, or alkyl.

12. The method of claim 11, wherein the amino acid residue is *L*-valinyl.
13. A method for the treatment of a host infected with a drug-resistant form of HBV that exhibits a mutation at the 552 codon from methionine to valine in the DNA polymerase region, comprising administering an effective amount of a compound of the formula:



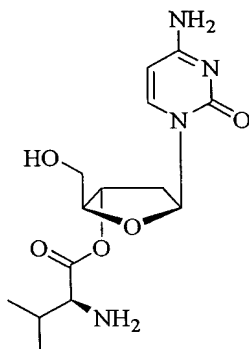
or a pharmaceutically acceptable salt, ester or prodrug thereof.

14. A method for the treatment of a host infected with a drug-resistant form of HBV that exhibits a mutation at the 552 codon from methionine to valine in the DNA polymerase region, comprising administering an effective amount of a compound of the formula:



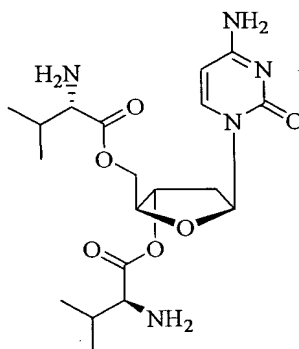
or a pharmaceutically acceptable salt, ester or prodrug thereof.

15. A method for the treatment of a host infected with a drug-resistant form of HBV that exhibits a mutation at the 552 codon from methionine to valine in the DNA polymerase region, comprising administering an effective amount of a compound of the formula:



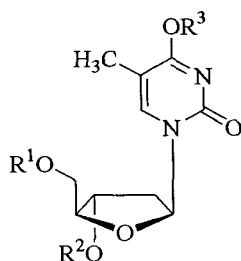
or a pharmaceutically acceptable salt, ester or prodrug thereof.

16. A method for the treatment of a host infected with a drug-resistant form of HBV that exhibits a mutation at the 552 codon from methionine to valine in the DNA polymerase region, comprising administering an effective amount of a compound of the formula:



or a pharmaceutically acceptable salt, ester or prodrug thereof.

17. A method for the treatment of a host infected with a drug-resistant form of HBV that exhibits a mutation at the 552 codon from methionine to valine in the DNA polymerase region, comprising administering an effective amount of a compound of the formula:



or a pharmaceutically acceptable salt, ester or prodrug thereof, wherein

R^1 and R^2 are independently hydrogen, straight chained, branched or cyclic alkyl, acyl, acetyl, butyryl, CO-alkyl, CO-aryl, CO-alkoxyalkyl, CO-aryloxyalkyl, CO-substituted aryl, alkylsulfonyl, arylsulfonyl, aralkylsulfonyl, amino acid residue, mono, di, or triphosphate, or a phosphate derivative; and

R^3 is hydrogen, straight chained, branched or cyclic alkyl, dialkylaminoalkylene, acyl, acetyl, butyryl, CO-alkyl, CO-aryl, CO-alkoxyalkyl, CO-aryloxyalkyl, CO-substituted aryl, alkylsulfonyl, arylsulfonyl, aralkylsulfonyl, amino acid residue, mono, di, or triphosphate, or a phosphate derivative.

18. The method of claim 17, wherein R^3 is H.
19. The method of claim 17, wherein R^1 and/or R^2 is H.
20. The method of claim 17, wherein at least one of R^1 or R^2 is an amino acid residue of the formula:



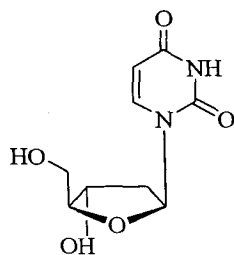
wherein:

R^8 is the side chain of an amino acid, alkyl, aryl, heteroaryl, heterocyclic, or can optionally attach to R^{10} to form a ring structure;

R^9 is hydrogen, alkyl, or aryl; and

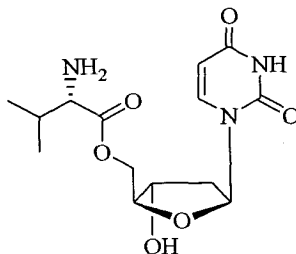
R^{10} and R^{11} are independently hydrogen, acyl, or alkyl.

21. The method of claim 20, wherein the amino acid residue is L-valinyl.
22. A method for the treatment of a host infected with a drug-resistant form of HBV that exhibits a mutation at the 552 codon from methionine to valine in the DNA polymerase region, comprising administering an effective amount of a compound of the formula:



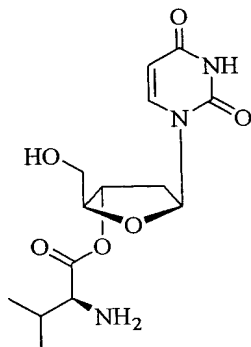
or a pharmaceutically acceptable salt, ester or prodrug thereof.

23. A method for the treatment of a host infected with a drug-resistant form of HBV that exhibits a mutation at the 552 codon from methionine to valine in the DNA polymerase region, comprising administering an effective amount of a compound of the formula:



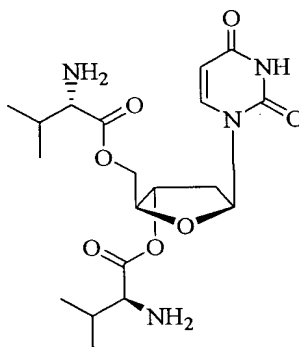
or a pharmaceutically acceptable salt, ester or prodrug thereof.

24. A method for the treatment of a host infected with a drug-resistant form of HBV that exhibits a mutation at the 552 codon from methionine to valine in the DNA polymerase region, comprising administering an effective amount of a compound of the formula:



or a pharmaceutically acceptable salt, ester or prodrug thereof.

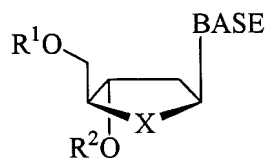
25. A method for the treatment of a host infected with a drug-resistant form of HBV that exhibits a mutation at the 552 codon from methionine to valine in the DNA polymerase region, comprising administering an effective amount of a compound of the formula:



or a pharmaceutically acceptable salt, ester or prodrug thereof.

26. A method for preventing or suppressing the expression of a mutation at the 552 codon from methionine to valine in the DNA polymerase region of HBV in a host, comprising administering an effective amount of a β -L-2'-deoxynucleoside, or a pharmaceutically acceptable salt, ester or prodrug.

27. A method for preventing or suppressing the expression of a mutation at the 552 codon from methionine to valine in the DNA polymerase region of HBV in a host, comprising administering an effective amount of a compound of the formula (I):



(I)

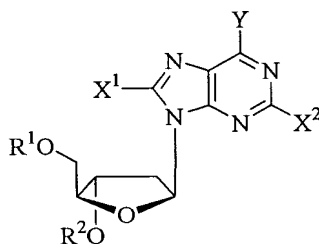
or a pharmaceutically acceptable salt, ester or prodrug thereof, wherein:

R¹ and R² are independently hydrogen, straight chained, branched or cyclic alkyl, acyl, acetyl, butyryl, CO-alkyl, CO-aryl, CO-alkoxyalkyl, CO-aryloxyalkyl, CO-substituted aryl, alkylsulfonyl, arylsulfonyl, aralkylsulfonyl, amino acid residue, mono, di, or triphosphate, or a phosphate derivative;

X is O, S, SO₂ or CH₂; and

BASE is a purine or pyrimidine base that may optionally be substituted.

28. A method for preventing or suppressing the expression of a mutation at the 552 codon from methionine to valine in the DNA polymerase region of HBV in a host, comprising administering an effective amount of a compound of the formula:



or a pharmaceutically acceptable salt, ester or prodrug thereof, wherein:

R¹ and R² are independently hydrogen, straight chained, branched or cyclic alkyl, acyl, acetyl, butyryl, CO-alkyl, CO-aryl, CO-alkoxyalkyl, CO-aryloxyalkyl, CO-

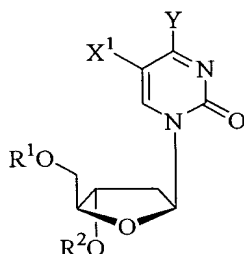
substituted aryl, alkylsulfonyl, arylsulfonyl, aralkylsulfonyl, amino acid residue, mono, di, or triphosphate, or a phosphate derivative;

Y is OR^3 , NR^3R^4 or SR^3 ;

X^1 and X^2 are independently selected from the group consisting of H, straight chained, branched or cyclic alkyl, acyl, acetyl, butyryl, CO-alkyl, CO-aryl, CO-alkoxyalkyl, halogen, OR^5 , NR^5R^6 or SR^5 ; and

R^3 , R^4 , R^5 and R^6 are independently H, straight chained, branched or cyclic alkyl, dialkylaminoalkylene, acyl, acetyl, butyryl, CO-alkyl, CO-aryl, CO-alkoxyalkyl, CO-aryloxyalkyl, CO-substituted aryl, alkylsulfonyl, arylsulfonyl, aralkylsulfonyl, amino acid residue, mono, di, or triphosphate, or a phosphate derivative.

29. A method for preventing or suppressing the expression of a mutation at the 552 codon from methionine to valine in the DNA polymerase region of HBV in a host, comprising administering an effective amount of a compound of the formula:



or a pharmaceutically acceptable salt, ester or prodrug thereof, wherein:

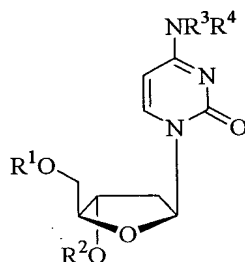
R^1 and R^2 are independently hydrogen, straight chained, branched or cyclic alkyl, acyl, acetyl, butyryl, CO-alkyl, CO-aryl, CO-alkoxyalkyl, CO-aryloxyalkyl, CO-substituted aryl, alkylsulfonyl, arylsulfonyl, aralkylsulfonyl, amino acid residue, mono, di, or triphosphate, or a phosphate derivative;

Y is OR^3 , NR^3R^4 or SR^3 ;

X¹ is selected from the group consisting of H, straight chained, branched or cyclic alkyl, acyl, acetyl, butyryl, CO-alkyl, CO-aryl, CO-alkoxyalkyl, halogen, OR⁵, NR⁵R⁶ or SR⁵; and

R³, R⁴, R⁵ and R⁶ are independently H, straight chained, branched or cyclic alkyl, dialkylaminoalkylene, acyl, acetyl, butyryl, CO-alkyl, CO-aryl, CO-alkoxyalkyl, CO-aryloxyalkyl, CO-substituted aryl, alkylsulfonyl, arylsulfonyl, aralkylsulfonyl, amino acid residue, mono, di, or triphosphate, or a phosphate derivative.

30. A method for preventing or suppressing the expression of a mutation at the 552 codon from methionine to valine in the DNA polymerase region of HBV in a host, comprising administering an effective amount of a compound of the formula:



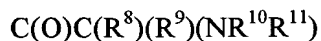
or a pharmaceutically acceptable salt, ester or prodrug thereof, wherein:

R¹ and R² are independently hydrogen, straight chained, branched or cyclic alkyl, acyl, acetyl, butyryl, CO-alkyl, CO-aryl, CO-alkoxyalkyl, CO-aryloxyalkyl, CO-substituted aryl, alkylsulfonyl, arylsulfonyl, aralkylsulfonyl, amino acid residue, mono, di, or triphosphate, or a phosphate derivative; and

R³ and R⁴ are independently H, straight chained, branched or cyclic alkyl, dialkylaminoalkylene, acyl, acetyl, butyryl, CO-alkyl, CO-aryl, CO-alkoxyalkyl, CO-aryloxyalkyl, CO-substituted aryl, alkylsulfonyl, arylsulfonyl, aralkylsulfonyl, amino acid residue, mono, di, or triphosphate, or a phosphate derivative.

31. The method of claims 30, wherein R³ and/or R⁴ are H.

32. The method of claim 30, wherein R¹ and/or R² is H.
33. The method of claim 30, wherein at least one of R¹, R² or R⁴ is an amino acid residue of the formula:



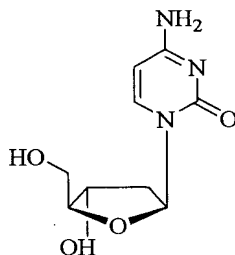
wherein:

R⁸ is the side chain of an amino acid, alkyl, aryl, heteroaryl, heterocyclic, or can optionally attach to R¹⁰ to form a ring structure;

R⁹ is hydrogen, alkyl, or aryl; and

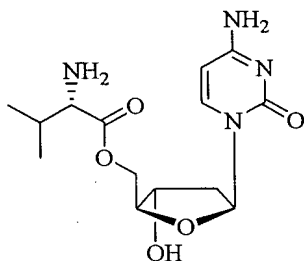
R¹⁰ and R¹¹ are independently hydrogen, acyl, or alkyl.

34. The method of claim 33, wherein the amino acid residue is L-valinyl.
35. A method for preventing or suppressing the expression of a mutation at the 552 codon from methionine to valine in the DNA polymerase region of HBV in a host, comprising administering an effective amount of a compound of the formula:



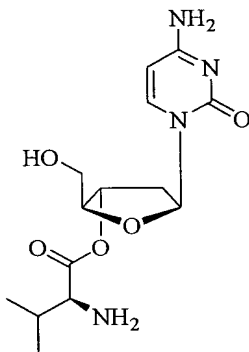
or a pharmaceutically acceptable salt, ester or prodrug thereof.

36. A method for preventing or suppressing the expression of a mutation at the 552 codon from methionine to valine in the DNA polymerase region of HBV in a host, comprising administering an effective amount of a compound of the formula:



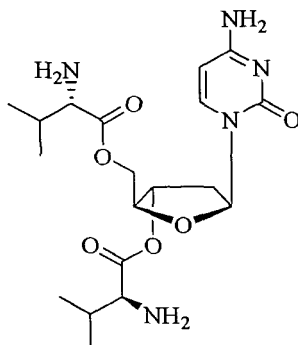
or a pharmaceutically acceptable salt, ester or prodrug thereof.

37. A method for preventing or suppressing the expression of a mutation at the 552 codon from methionine to valine in the DNA polymerase region of HBV in a host, comprising administering an effective amount of a compound of the formula:



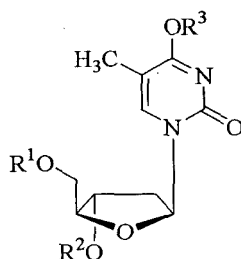
or a pharmaceutically acceptable salt, ester or prodrug thereof.

38. A method for preventing or suppressing the expression of a mutation at the 552 codon from methionine to valine in the DNA polymerase region of HBV in a host, comprising administering an effective amount of a compound of the formula:



or a pharmaceutically acceptable salt, ester or prodrug thereof.

39. A method for preventing or suppressing the expression of a mutation at the 552 codon from methionine to valine in the DNA polymerase region of HBV in a host, comprising administering an effective amount of a compound of the formula:



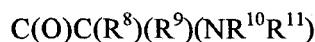
or a pharmaceutically acceptable salt, ester or prodrug thereof, wherein

R^1 and R^2 are independently hydrogen, straight chained, branched or cyclic alkyl, acyl, acetyl, butyryl, CO-alkyl, CO-aryl, CO-alkoxyalkyl, CO-aryloxyalkyl, CO-substituted aryl, alkylsulfonyl, arylsulfonyl, aralkylsulfonyl, amino acid residue, mono, di, or triphosphate, or a phosphate derivative; and

R^3 is hydrogen, straight chained, branched or cyclic alkyl, dialkylaminoalkylene, acyl, acetyl, butyryl, CO-alkyl, CO-aryl, CO-alkoxyalkyl, CO-aryloxyalkyl, CO-

substituted aryl, alkylsulfonyl, arylsulfonyl, aralkylsulfonyl, amino acid residue, mono, di, or triphosphate, or a phosphate derivative.

40. The method of claim 39, wherein R^3 is H.
41. The method of claim 39, wherein R^1 and/or R^2 is H.
42. The method of claim 39, wherein at least one of R^1 or R^2 is an amino acid residue of the formula:



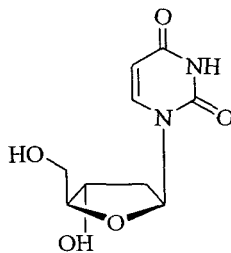
wherein:

R^8 is the side chain of an amino acid, alkyl, aryl, heteroaryl, heterocyclic, or can optionally attach to R^{10} to form a ring structure;

R^9 is hydrogen, alkyl, or aryl; and

R^{10} and R^{11} are independently hydrogen, acyl, or alkyl.

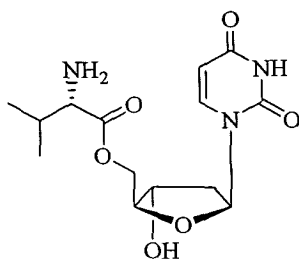
43. The method of claim 42, wherein the amino acid residue is L-valinyl.
44. A method for preventing or suppressing the expression of a mutation at the 552 codon from methionine to valine in the DNA polymerase region of HBV in a host, comprising administering an effective amount of a compound of the formula:



or a pharmaceutically acceptable salt, ester or prodrug thereof.

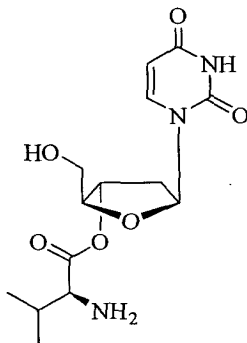
45. A method for preventing or suppressing the expression of a mutation at the 552 codon from methionine to valine in the DNA polymerase region of HBV in a

host, comprising administering an effective amount of a compound of the formula:



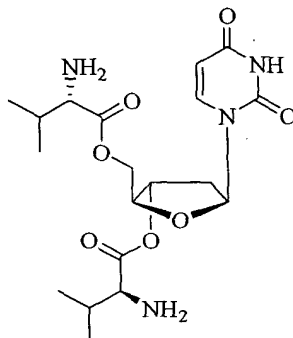
or a pharmaceutically acceptable salt, ester or prodrug thereof.

46. A method for preventing or suppressing the expression of a mutation at the 552 codon from methionine to valine in the DNA polymerase region of HBV in a host, comprising administering an effective amount of a compound of the formula:



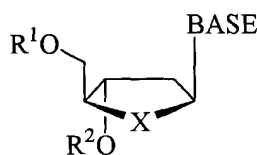
or a pharmaceutically acceptable salt, ester or prodrug thereof.

47. A method for preventing or suppressing the expression of a mutation at the 552 codon from methionine to valine in the DNA polymerase region of HBV in a host, comprising administering an effective amount of a compound of the formula:



or a pharmaceutically acceptable salt, ester or prodrug thereof.

48. A method for preventing or suppressing the expression of a mutation at the 552 codon from methionine to valine and at the 526 or 528 codon from leucine to methionine in the DNA polymerase region of HBV in a host, comprising administering an effective amount of a β -L-2'-deoxynucleoside, or a pharmaceutically acceptable salt, ester or prodrug.
49. A method for preventing or suppressing the expression of a mutation at the 552 codon from methionine to valine and at the 526 or 528 codon from leucine to methionine in the DNA polymerase region of HBV in a host, comprising administering an effective amount of a compound of the formula (I):



(I)

or a pharmaceutically acceptable salt, ester or prodrug thereof, wherein:

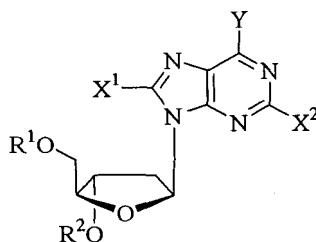
R^1 and R^2 are independently hydrogen, straight chained, branched or cyclic alkyl, acyl, acetyl, butyryl, CO-alkyl, CO-aryl, CO-alkoxyalkyl, CO-aryloxyalkyl, CO-

substituted aryl, alkylsulfonyl, arylsulfonyl, aralkylsulfonyl, amino acid residue, mono, di, or triphosphate, or a phosphate derivative;

X is O, S, SO₂ or CH₂; and

BASE is a purine or pyrimidine base that may optionally be substituted.

50. A method for preventing or suppressing the expression of a mutation at the 552 codon from methionine to valine and at the 526 or 528 codon from leucine to methionine in the DNA polymerase region of HBV in a host, comprising administering an effective amount of a compound of the formula:



or a pharmaceutically acceptable salt, ester or prodrug thereof, wherein:

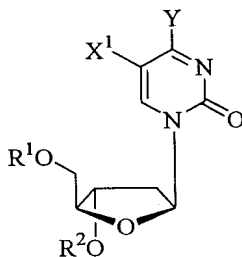
R¹ and R² are independently hydrogen, straight chained, branched or cyclic alkyl, acyl, acetyl, butyryl, CO-alkyl, CO-aryl, CO-alkoxyalkyl, CO-aryloxyalkyl, CO-substituted aryl, alkylsulfonyl, arylsulfonyl, aralkylsulfonyl, amino acid residue, mono, di, or triphosphate, or a phosphate derivative;

Y is OR³, NR³R⁴ or SR³;

X¹ and X² are independently selected from the group consisting of H, straight chained, branched or cyclic alkyl, acyl, acetyl, butyryl, CO-alkyl, CO-aryl, CO-alkoxyalkyl, halogen, OR⁵, NR⁵R⁶ or SR⁵; and

R³, R⁴, R⁵ and R⁶ are independently H, straight chained, branched or cyclic alkyl, dialkylaminoalkylene, acyl, acetyl, butyryl, CO-alkyl, CO-aryl, CO-alkoxyalkyl, CO-aryloxyalkyl, CO-substituted aryl, alkylsulfonyl, arylsulfonyl, aralkylsulfonyl, amino acid residue, mono, di, or triphosphate, or a phosphate derivative.

51. A method for preventing or suppressing the expression of a mutation at the 552 codon from methionine to valine and at the 526 or 528 codon from leucine to methionine in the DNA polymerase region of HBV in a host, comprising administering an effective amount of a compound of the formula:



or a pharmaceutically acceptable salt, ester or prodrug thereof, wherein:

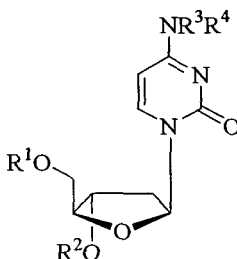
R^1 and R^2 are independently hydrogen, straight chained, branched or cyclic alkyl, acyl, acetyl, butyryl, CO-alkyl, CO-aryl, CO-alkoxyalkyl, CO-aryloxyalkyl, CO-substituted aryl, alkylsulfonyl, arylsulfonyl, aralkylsulfonyl, amino acid residue, mono, di, or triphosphate, or a phosphate derivative;

Y is OR^3 , NR^3R^4 or SR^3 ;

X^1 is selected from the group consisting of H, straight chained, branched or cyclic alkyl, acyl, acetyl, butyryl, CO-alkyl, CO-aryl, CO-alkoxyalkyl, halogen, OR^5 , NR^5R^6 or SR^5 ; and

R^3 , R^4 , R^5 and R^6 are independently H, straight chained, branched or cyclic alkyl, dialkylaminoalkylene, acyl, acetyl, butyryl, CO-alkyl, CO-aryl, CO-alkoxyalkyl, CO-aryloxyalkyl, CO-substituted aryl, alkylsulfonyl, arylsulfonyl, aralkylsulfonyl, amino acid residue, mono, di, or triphosphate, or a phosphate derivative.

52. A method for preventing or suppressing the expression of a mutation at the 552 codon from methionine to valine and at the 526 or 528 codon from leucine to methionine in the DNA polymerase region of HBV in a host, comprising administering an effective amount of a compound of the formula:

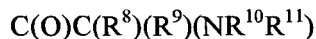


or a pharmaceutically acceptable salt, ester or prodrug thereof, wherein:

R¹ and R² are independently hydrogen, straight chained, branched or cyclic alkyl, acyl, acetyl, butyryl, CO-alkyl, CO-aryl, CO-alkoxyalkyl, CO-aryloxyalkyl, CO-substituted aryl, alkylsulfonyl, arylsulfonyl, aralkylsulfonyl, amino acid residue, mono, di, or triphosphate, or a phosphate derivative; and

R³ and R⁴ are independently H, straight chained, branched or cyclic alkyl, dialkylaminoalkylene, acyl, acetyl, butyryl, CO-alkyl, CO-aryl, CO-alkoxyalkyl, CO-aryloxyalkyl, CO-substituted aryl, alkylsulfonyl, arylsulfonyl, aralkylsulfonyl, amino acid residue, mono, di, or triphosphate, or a phosphate derivative.

53. The method of claims 52, wherein R³ and/or R⁴ is H.
54. The method of claim 52, wherein R¹ and/or R² is H.
55. The method of claim 52, wherein at least one of R¹, R² or R⁴ is an amino acid residue of the formula:



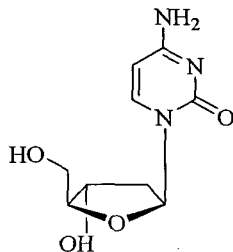
wherein:

R⁸ is the side chain of an amino acid, alkyl, aryl, heteroaryl, heterocyclic, or can optionally attach to R¹⁰ to form a ring structure;

R^9 is hydrogen, alkyl, or aryl; and

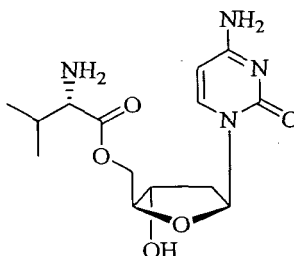
R^{10} and R^{11} are independently hydrogen, acyl, or alkyl.

56. The method of claim 55, wherein the amino acid residue is L-valinyl.
57. A method for preventing or suppressing the expression of a mutation at the 552 codon from methionine to valine and at the 526 or 528 codon from leucine to methionine in the DNA polymerase region of HBV in a host, comprising administering an effective amount of a compound of the formula:



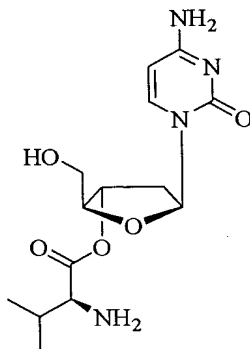
or a pharmaceutically acceptable salt, ester or prodrug thereof.

58. A method for preventing or suppressing the expression of a mutation at the 552 codon from methionine to valine and at the 526 or 528 codon from leucine to methionine in the DNA polymerase region of HBV in a host, comprising administering an effective amount of a compound of the formula:



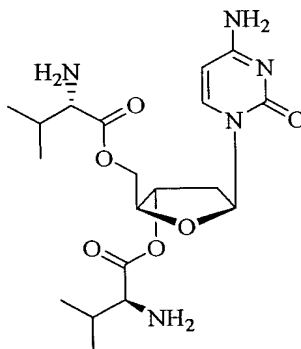
or a pharmaceutically acceptable salt, ester or prodrug thereof.

59. A method for preventing or suppressing the expression of a mutation at the 552 codon from methionine to valine and at the 526 or 528 codon from leucine to methionine in the DNA polymerase region of HBV in a host, comprising administering an effective amount of a compound of the formula:



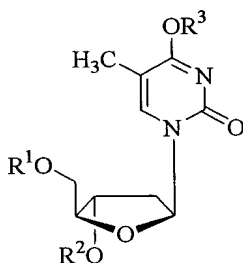
or a pharmaceutically acceptable salt, ester or prodrug thereof.

60. A method for preventing or suppressing the expression of a mutation at the 552 codon from methionine to valine and at the 526 or 528 codon from leucine to methionine in the DNA polymerase region of HBV in a host, comprising administering an effective amount of a compound of the formula:



or a pharmaceutically acceptable salt, ester or prodrug thereof.

61. A method for preventing or suppressing the expression of a mutation at the 552 codon from methionine to valine and at the 526 or 528 codon from leucine to methionine in the DNA polymerase region of HBV in a host, comprising administering an effective amount of a compound of the formula:



or a pharmaceutically acceptable salt, ester or prodrug thereof, wherein

R¹ and R² are independently hydrogen, straight chained, branched or cyclic alkyl, acyl, acetyl, butyryl, CO-alkyl, CO-aryl, CO-alkoxyalkyl, CO-aryloxyalkyl, CO-substituted aryl, alkylsulfonyl, arylsulfonyl, aralkylsulfonyl, amino acid residue, mono, di, or triphosphate, or a phosphate derivative; and

R³ is hydrogen, straight chained, branched or cyclic alkyl, dialkylaminoalkylene, acyl, acetyl, butyryl, CO-alkyl, CO-aryl, CO-alkoxyalkyl, CO-aryloxyalkyl, CO-substituted aryl, alkylsulfonyl, arylsulfonyl, aralkylsulfonyl, amino acid residue, mono, di, or triphosphate, or a phosphate derivative.

62. The method of claim 61, wherein R³ is H.
63. The method of claim 61, wherein R¹ and/or R² is H.
64. The method of claim 61, wherein at least one of R¹ or R² is an amino acid residue of the formula:



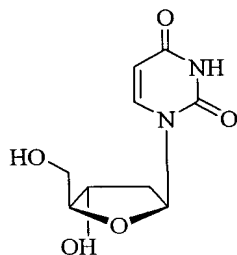
wherein:

R⁸ is the side chain of an amino acid, alkyl, aryl, heteroaryl, heterocyclic, or can optionally attach to R¹⁰ to form a ring structure;

R⁹ is hydrogen, alkyl, or aryl; and

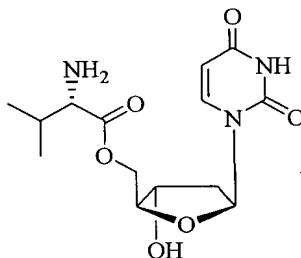
R^{10} and R^{11} are independently hydrogen, acyl, or alkyl.

65. The method of claim 64, wherein the amino acid residue is L-valinyl.
66. A method for preventing or suppressing the expression of a mutation at the 552 codon from methionine to valine and at the 526 or 528 codon from leucine to methionine in the DNA polymerase region of HBV in a host, comprising administering an effective amount of a compound of the formula:



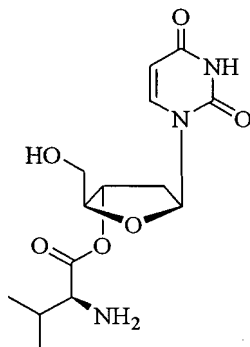
or a pharmaceutically acceptable salt, ester or prodrug thereof.

67. A method for preventing or suppressing the expression of a mutation at the 552 codon from methionine to valine and at the 526 or 528 codon from leucine to methionine in the DNA polymerase region of HBV in a host, comprising administering an effective amount of a compound of the formula:



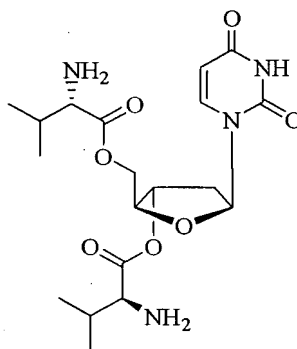
or a pharmaceutically acceptable salt, ester or prodrug thereof.

68. A method for preventing or suppressing the expression of a mutation at the 552 codon from methionine to valine and at the 526 or 528 codon from leucine to methionine in the DNA polymerase region of HBV in a host, comprising administering an effective amount of a compound of the formula:



or a pharmaceutically acceptable salt, ester or prodrug thereof.

69. A method for preventing or suppressing the expression of a mutation at the 552 codon from methionine to valine and at the 526 or 528 codon from leucine to methionine in the DNA polymerase region of HBV in a host, comprising administering an effective amount of a compound of the formula:



or a pharmaceutically acceptable salt, ester or prodrug thereof.

70. The method of any one of claims 1-69, further comprising administering in combination and/or alternation an effective amount of one or more other anti-HBV agents.

71. The method of claim 70 wherein at the other anti-HBV agents is selected from the group consisting of 3TC, FTC, L-FMAU, DAPD, DXG, famciclovir, penciclovir, BMS-200475, bis pom PMEA (adefovir, dipivoxil), lobucavir, ganciclovir, tenofovir, Lfd4C, foscarnet (trisodium phosphonoformate), isoprinosine, levamisole, N-acetylcystine (NAC), interferon, pegylated interferon, ISS, ribavirin, PC1323 or polyadencyclic polyuridylic acid.
72. The method of claim 71 wherein at least one of the other anti-HBV agents is interferon.
73. The method of claim 72, wherein the interferon is selected from the group consisting of interferon alpha, pegylated interferon alpha, interferon alpha-2a, interferon alpha-2b, pegylated interferon alpha-2a, pegylated interferon alpha-2b ROFERON®-A (interferon alpha-2a), PEGASYS® (pegylated interferon alpha-2a), INTRON®A (Interferon alpha-2b), PEG-INTRON® (pegylated Interferon alpha-2b), interferon beta, interferon gamma, interferon tau, interferon omega, consensus interferon, INFERGEN (interferon alphacon-1), OMNIFERON (natural interferon), REBIF (interferon beta-1a), omega interferon, oral interferon alpha, interferon gamma-1b, SuperFeron (natural human multi-subtype IFN-alpha), and HuFeron (human IFN-beta).
74. The method of any one of claims 1-5, wherein the host is a mammal.
75. The method of claim 74, wherein the host is a human.